

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A sound field correcting method in an audio system, for supplying audio signals to a plurality of first sound generating means having a first reproducing frequency band and a second reproducing frequency band and a second sound generating means having the second reproducing frequency band, said correcting method comprising:

a first step of supplying a noise simultaneously to said plurality of first sound generating means and then detecting a reproduced sound in the first reproducing frequency band that is reproduced by said plurality of first sound generating means;

a second step of supplying the noise simultaneously to said plurality of first sound generating means and then detecting a reproduced sound in the second reproducing frequency band that is reproduced by said plurality of first sound generating means;

a third step of supplying the noise to said second sound generating means and then detecting the reproduced sound in the second reproducing frequency band; and

a fourth step of performing phase characteristic correction on the audio signals supplied to said plurality of first sound generating means and said second sound generating means; and, thereafter

a ~~fourth~~fifth step of adjusting levels of the audio signals supplied to said plurality of first sound generating means and said second sound generating means such that a sum of a spectrum average level of the reproduced sound in the second reproducing frequency band reproduced by

said plurality of first sound generating means and detected by the second step and a spectrum average level of the reproduced sound in the second reproducing frequency band reproduced by said second sound generating means and detected by the third step and a spectrum average level of the reproduced sound in the first reproducing frequency band detected by the first step are set equal to a ratio of predetermined target characteristics.

2. (currently amended): A sound field correcting method in an audio system, for supplying audio signals to a plurality of first sound generating means having a first reproducing frequency band and a second reproducing frequency band and a second sound generating means having the second reproducing frequency band, said correcting method comprising:

a first step of supplying a noise simultaneously to said plurality of first sound generating means and then detecting a reproduced sound in the first reproducing frequency band that is reproduced by said plurality of first sound generating means;

a second step of supplying the noise simultaneously to said plurality of first sound generating means and then detecting a reproduced sound in the second reproducing frequency band that is reproduced by said plurality of first sound generating means;

a third step of supplying the noise to said second sound generating means and then detecting the reproduced sound in the second reproducing frequency band; ~~and~~

a fourth step of performing phase characteristic correction on the audio signals supplied to said plurality of first sound generating means and said second sound generating means; and, thereafter

a ~~fourth~~-fifth step of adjusting levels of the audio signals supplied to said plurality of first sound generating means and said second sound generating means such that a ratio of a sum of a spectrum average level of the reproduced sound in the second reproducing frequency band reproduced by said plurality of first sound generating means and detected by the second step and a spectrum average level of the reproduced sound in the second reproducing frequency band reproduced by said second sound generating means and detected by the third step to a spectrum average level of the reproduced sound in the first reproducing frequency band detected by the first step is set equal to a predetermined value.

3. (original): The sound field correcting method in an audio system, according to claim 1 or 2, wherein the first reproducing frequency band is substantially equal to an audio frequency band, and the second reproducing frequency band is substantially equal to a low frequency band.

4. (original): The sound field correcting method in an audio system, according to claim 1, wherein the first reproducing frequency band is substantially equal to an audio frequency band, and the second reproducing frequency band is substantially equal to a high frequency band.

5. (currently amended): A sound field correcting method in an audio system which supplies audio signals to a plurality of first sound generators having a first reproducing frequency

band and a second reproducing frequency band and to a second sound generator having the second reproducing frequency band, said correcting method comprising:

a first step of supplying a noise simultaneously to said plurality of first sound generators and then detecting a reproduced sound in the first reproducing frequency band that is reproduced by said plurality of first sound generators;

a second step of supplying the noise simultaneously to said plurality of first sound generators and then detecting a reproduced sound in the second reproducing frequency band that is reproduced by said plurality of first sound generators;

a third step of supplying the noise to said second sound generator and then detecting the reproduced sound in the second reproducing frequency band; ~~and~~

a fourth step of performing phase characteristic correction on the audio signals supplied to said plurality of first sound generators and said second sound generators; and, thereafter

a ~~fourth-fifth~~ step of adjusting levels of the audio signals supplied to said plurality of first sound generators and said second sound generator such that a sum of a spectrum average level of the reproduced sound in the second reproducing frequency band reproduced by said first sound generators and detected by the second step and a spectrum average level of the reproduced sound in the second reproducing frequency band reproduced by said second sound generator and detected by the third step and a spectrum average level of the reproduced sound in the first reproducing frequency band detected by the first step are set equal to a ratio of predetermined target characteristics.

6. (currently amended): A sound field correcting method in an audio system which supplies audio signals to a plurality of first sound generators having a first reproducing frequency band and a second reproducing frequency band and to a second sound generator having the second reproducing frequency band, said correcting method comprising:

a first step of supplying a noise simultaneously to said plurality of first sound generators and then detecting a reproduced sound in the first reproducing frequency band, that is reproduced by said plurality of first sound generators;

a second step of supplying the noise simultaneously to said plurality of first sound generators and then detecting a reproduced sound in the second reproducing frequency band that is reproduced by said plurality of first sound generators;

a third step of supplying the noise to said second sound generator and then detecting the reproduced sound in the second reproducing frequency band;~~and~~

a fourth step of performing phase characteristic correction on the audio signals supplied to said plurality of first sound generators and said second sound generators; and, thereafter

~~a fourth~~ fifth step of adjusting levels of the audio signals supplied to said plurality of first sound generators and said second sound generator such that a ratio of a sum of a spectrum average level of the reproduced sound in the second reproducing frequency band reproduced by said plurality of first sound generators and detected by the second step and a spectrum average level of the reproduced sound in the second reproducing frequency band reproduced by said second sound generator and detected by the third step to a spectrum average level of the reproduced sound in the first reproducing frequency band detected by the first step is set equal to a predetermined value.

7. (previously presented): The sound field correcting method in an audio system, according to claim 5, wherein the first reproducing frequency band is substantially equal to an audio frequency band, and the second reproducing frequency band is substantially equal to a low frequency band.

8. (previously presented): The sound field correcting method in an audio system, according to claim 5, wherein the first reproducing frequency band is substantially equal to an audio frequency band, and the second reproducing frequency band is substantially equal to a high frequency band.

9. (previously presented): The sound field correcting method in an audio system, according to claim 6, wherein the first reproducing frequency band is substantially equal to an audio frequency band, and the second reproducing frequency band is substantially equal to a low frequency band.

10. (currently amended): A sound field correcting method, comprising:
detecting a first reproduced sound and a second reproduced sound from a plurality of first speakers, said first and second reproduced sounds being generated by supplying a noise simultaneously to said plurality of first speakers, wherein the first reproduced sound is in a first frequency band and the second reproduced sound is in a second frequency band;

detecting a third reproduced sound from a second speaker, wherein the third reproduced sound is in the second frequency band; and

performing phase characteristic correction of said first audio signals and said second audio signals; and, thereafter

adjusting first audio signals supplied to said plurality of first speakers and second audio signals supplied to the second speaker such that a sum of a spectrum average level of the second reproduced sound, a spectrum average level of the third reproduced sound, and a spectrum average level of the first reproduced sound are set equal to a ratio of predetermined target characteristics.

11. (previously presented): A sound field correcting method, comprising:

detecting a first reproduced sound and a second reproduced sound, said first and second reproduced sounds being generated by supplying a noise simultaneously to a plurality of first speakers, wherein the first reproduced sound is in a first frequency band and the second reproduced sound is in a second frequency band;

detecting a third reproduced sound from a second speaker, wherein the third reproduced sound is in the second frequency band; and

adjusting first audio signals supplied to said plurality of first speakers and second audio signals supplied to said second speaker such that a ratio of (1) a sum of a spectrum average level of the second reproduced sound and a spectrum average level of the third reproduced sound to (2) a spectrum average level of the first reproduced sound is set equal to a predetermined value.

12. (previously presented): The method according to claim 10, wherein the first frequency band is substantially equal to an audio frequency band, and wherein the second frequency band is substantially equal to a low frequency band.

13. (previously presented): The method according to claim 11, wherein the first frequency band is substantially equal to an audio frequency band, and wherein the second frequency band is substantially equal to a low frequency band.

14. (previously presented): The method according to claim 10, wherein the first frequency band is substantially equal to an audio frequency band, and the second frequency band is substantially equal to a high frequency band.

15. (currently amended): A sound field corrector, comprising:
a detection circuit that detects a first reproduced sound, a second reproduced sound, and a third reproduced sound,

wherein the first reproduced sound is in a first frequency band, the second reproduced sound is in a second frequency band, and the third reproduced sound is in the second frequency band, and

wherein a plurality of first speakers simultaneously outputs the first reproduced sound, said plurality of first speakers simultaneously outputs the second reproduced sound and a second speaker outputs the third reproduced sound; and

a control circuit that performs phase characteristic correction of said first audio signals and said second audio signals and, thereafter, adjusts first audio signals supplied to said plurality of first speakers and second audio signals supplied to the second speaker such that a sum of a spectrum average level of the second reproduced sound, a spectrum average level of the third reproduced sound, and a spectrum average level of the first reproduced sound are set equal to a ratio of predetermined target characteristics.

16. (previously presented): A sound field corrector, comprising:

a detection circuit that detects a first reproduced sound, a second reproduced sound, and a third reproduced sound,

wherein the first reproduced sound is in a first frequency band, the second reproduced sound is in a second frequency band, and the third reproduced sound is in the second frequency band, and

wherein a plurality of first speakers simultaneously outputs the first reproduced sound, said plurality of first speakers simultaneously outputs the second reproduced sound and a second speaker outputs the third reproduced sound; and

a control circuit that adjusts first audio signals supplied to said plurality of first speakers and second audio signals supplied to said second speaker such that a ratio of (1) a sum of a spectrum average level of the second reproduced sound and a spectrum average level of the third reproduced sound to (2) a spectrum average level of the first reproduced sound is set equal to a predetermined value.

17. (previously presented): The corrector according to claim 15, wherein the first frequency band is substantially equal to an audio frequency band, and wherein the second frequency band is substantially equal to a low frequency band.

18. (previously presented): The corrector according to claim 16, wherein the first frequency band is substantially equal to an audio frequency band, and wherein the second frequency band is substantially equal to a low frequency band.

19. (previously presented): The corrector according to claim 15, wherein the first frequency band is substantially equal to an audio frequency band, and the second frequency band is substantially equal to a high frequency band.